

# **SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD**

## **EXECUTIVE OFFICER'S REPORT**

**July 16, 2003**

### **PART A**

#### **SAN DIEGO REGION STAFF ACTIVITIES** *(Staff Contact)*

1. County of San Diego "Clean Water Summit" *(Bruce Posthumus)*

On June 20, the County of San Diego hosted its annual "Clean Water Summit," a part of its "Project Clean Water." Chairman Minan, Board Member Wright, John Robertus, Mike McCann, and Bruce Posthumus attended. In addition to concurrent sessions on comprehensive planning, legislative and regulatory issues, science and technology, and education and resource development, the event featured combined sessions with talks by County supervisors and other high level County officials and the presentation of "clean water champion" awards to several individuals and groups. Board Member Wright received an award for his work on geographic information systems.

More information about the Clean Water Summit and Project Clean Water is available at <http://www.projectcleanwater.org/index.html>.

2. Region 8/Region 9 Coordination Meeting *(Art Coe)*

On July 2 management staff members of the Santa Ana and San Diego water boards met in Rancho California to discuss issues of mutual interest. John Robertus, Art Coe, David Barker, Mike McCann, Bob Morris and Deborah Jayne of our staff attended, as did counterparts from the Santa Ana Region. During the meeting we agreed on procedures to resolve confusion over the location of the Region 8/Region 9 boundary and on a coordinated review process for common reports submitted pursuant to the regions respective municipal stormwater permits for Orange County. We also discussed municipal stormwater permitting issues for Riverside County (Region 8 has adopted theirs; Region 9's is pending). Other issues discussed included the respective region's experience with and approach to implementation of TMDLs and Region 8's experience with the Triennial Review Process for water quality standards.

A lengthy discussion of Region 8's experiences with salt control in the Santa Ana River basin was particularly enlightening for San Diego Region staff.

Participants agreed that the meeting was beneficial for both regions and that future meetings should be held as significant common issues arise. It was also agreed to set up a coordination meeting between staff members from regions 4, 8 and 9 to discuss coastal issues common to the three regions.

**PART B**  
**SIGNIFICANT REGIONAL WATER QUALITY ISSUES**

**1. Sanitary Sewer Overflows (SSO)** (*Chiara Clemente, David Hanson, Bryan Ott, Victor Vasquez*)  
*(Attachment B-1)*

From June 1 to June 30, 2003, there were 22 sanitary sewer overflows (SSOs) from publicly-owned collection systems reported to the Regional Board office; 12 of these spills reached surface waters or storm drains, but none resulted in closure of recreational waters. Of the total number of overflows from public systems, 5 were 1,000 gallons or more.

Seven sewage overflows from private property were also reported from June 1-30; one was 1,000 gallons or more. Five of the private property spills reached surface waters or storm drains, but none resulted in closure of recreational waters.

Only trace amounts of rainfall were recorded at San Diego's Lindbergh Field for June 2003. For comparison, in May 2003, 0.30 inches of rainfall were recorded, and 25 public SSOs were reported. In June 2002, trace rainfall was recorded, and 25 public SSOs were reported.

Regional Board staff has updated the sewer overflow statistics for each sewer agency by fiscal year (FY) since FY 1998-99 in the attached table entitled "Sanitary Sewer Overflow Statistics." The annual report that was included in the agenda materials for the January Board meeting, titled "Public SSO Statistics Summary for FY 2001-02," is also attached. Staff is in the process of gathering information to report spills using a new reporting parameter (i.e. volume of sewage spilled/total volume conveyed through each system) and will continue to improve the manner that SSO data are presented in the future in order to provide the Regional Board the most meaningful and insightful information.

No Notices of Violation (NOV) were issued in June 2003 for significant sanitary sewer overflows.

**2. Clean Water Act Section 401 Water Quality Certification Actions Taken in June 2003**  
*(Stacey Baczkowski)*

| DATE    | APPLICANT                  | PROJECT TITLE                          | PROJECT DESCRIPTION  | CERTIFICATION ACTION <sup>1</sup> |
|---------|----------------------------|--|--|-----------------------------------|
| 6/10/03 | City of San Marcos         | Grand Acres Commercial Shopping Center | Construct approximately 273,841 square feet of retail space on 25.7 acres.   | Conditional                       |
| 6/13/03 | San Diego Gas and Electric | SDG&E 16-Inch TM La Honda Project      | Excavate approximately 30 linear feet of an unnamed tributary to Escondido Creek in order to repair an anomaly encountered in this area of the pipeline. | Conditional                       |

|         |   |                                  |  |             |
|---------|---|----------------------------------|--|-------------|
| 6/19/03 | Centex Homes                            | Creekside Village (Otay Mesa 46) | Create a multi-lot residential development in a largely disturbed lot adjacent to Nestor Creek and stabilize 440 linear feet of the south bank of Nestor Creek.  | Conditional |
| 6/23/03 | Sunny Days Properties, LLC              | TT No.29484 at Briggs Road       | Construction of 242 residential lots; one 12-acre open space lot; and two vegetated basins on approx. 90 acres. Project includes a 10-foot extension of the culverts under Briggs Road at the Warm Springs tributary to French Valley Creek.                       | Conditional |
| 6/23/03 | California Department of Transportation | Construct Auxiliary Lane         | The project would address congestion and improve mobility along a portion of the I-15 corridor. Includes four managed lanes in the existing freeway median, direct access ramp interchanges to facilitate high occupancy vehicles, and, widening existing bridges. | Standard    |
| 6/30/03 | Murrieta Venture, L.P.                  | Creekside Village Specific Plan  | Construct 300 single-family residential units, 390 multiple family units, an elementary school, a small neighborhood park, a community trail, and two stormwater detention basins.   | Conditional |

1 - Standard certification is issued to projects that have minimal potential to adversely impact water quality. Conditional certification is issued to projects that have the potential to adversely impact water quality, but by complying with technical conditions, will have minimal impacts. Denials are issued when the projects will adversely impact water quality and suitable mitigation measures are not proposed or possible. Time expired refers to projects that may proceed due to the lack of an action by the Regional Board within specified regulatory timelines.

Public notification of pending 401 Water Quality Certification applications can be found on our web site at [http://www.swrcb.ca.gov/rwqcb9/Programs/Special\\_Programs/401\\_Certification/401\\_certification.html](http://www.swrcb.ca.gov/rwqcb9/Programs/Special_Programs/401_Certification/401_certification.html).

### 3. Electronic Filing System Demonstration Project (Mike Porter)

Professors Keith Pezzoli and Richard Marciano from the University of California San Diego (UCSD) have received preliminary grant funds to assist the RWQCB to explore the electronic storage of files. Currently, the researchers are reviewing, identifying and scanning several Section 401 Water Quality Certification files as a demonstration project. The project is not just merely scanning pages, but includes developing electronic links between project elements, specific actions, and other data sets. This preliminary project is one of the steps to a paperless office that will allow board members, staff, and the public equal access to common information through any computer. The demonstration project is the first part of a much larger, similar project that UCSD and the RWQCB will undertake later this year if UCSD is awarded the final, larger grant.

The larger project will focus on electronically consolidating the germane environmental documents, permits, and databases (graphical and textural) for Section 401 Water Quality Certification impacts and requisite compensatory mitigation within the San Diego River watershed. The larger project will include the similar and parallel documents from other agencies. This consolidated information will be stored and made available to the public through the UCSD Super Computing Center.

4. First Payment of \$500 ACL Liability by Castillo & Sons, A & E Auto Recycling  
(*Vicente Rodriguez*)

In June 2003, the Regional Board agreed to accept Castillo and Sons' proposal to make a minimum of six monthly payments of \$500 to pay off the \$3,000 liability imposed by ACL Order No. R9-2002-0284, issued in November 2002. On June 30, 2003, Ramon M. Castillo made a timely payment of \$500. The next payment of \$500 is due July 31, 2003.

5. Status Report: U.S Coast Guard and U.S. Navy Report on Fuel/Oil Spills in San Diego Bay (*Michael McCann*) (*Attachment B-5*)

At the June 11 Regional Board Meeting LCDR Rick Sorrell of the U.S. Coast Guard and Mr. Don Montoro of the U.S. Navy gave the Board a joint presentation on the record of Fuel/Oil spills in San Diego Bay and Mission Bay for the past year. Attached to this report is the print out of their PowerPoint presentation. The Board asked LCDR Sorrell for any information the Coast Guard had on the other bays in the San Diego Region. The Coast Guard's Marine Safety Office subsequently reported that no reportable spills this past year have been received by their office from the other bays in our region—Oceanside Harbor, Del Mar Boat Basin, and Dana Point Harbor.

6. Bight 2003 Regional Monitoring Program (*Brian Kelley*) (*Attachment B-6*)

The Southern California Coastal Water Research Project Authority (SCCWRP) is a joint powers agency focusing on marine environmental research, whose mission is to gather scientific information so that its member agencies can effectively, and cost-efficiently, protect the Southern California marine environment. SCCWRP is governed by a nine-member commission that includes representatives of city, county, state, and federal government agencies responsible for monitoring and protecting the marine environment. The member agencies consist of the cities of Los Angeles and San Diego; the County Sanitation Districts of Los Angeles and Orange Counties; the Los Angeles, San Diego, and Santa Ana Regional Water Quality Control Boards; the State Water Resources Control Board, and the US Environmental Protection Agency.

SCCWRP has previously coordinated two integrated regional monitoring surveys for the Southern California Bight (SCB), the stretch of Southern California coastline from Point Conception in Santa Barbara County to Cabo Colnett, south of Ensenada, Mexico. The first was conducted in 1994, with 12 organizations participating. The second was conducted in 1998 and expanded on the first by including more participants (62 organizations), adding a shoreline microbiology component and coordinating with a complementary program conducted in Baja California, Mexico. These surveys are designed to gather region-wide environmental data to address both ambient conditions

and effects from point source discharges for assessing compliance with permit requirements. Based on the success of these efforts, the SCCWRP Commission has asked its staff to coordinate these regional monitoring surveys on a recurring five-year basis, with the next survey set for 2003 and referred to as "Bight '03".

The data collection phase of the Bight '03 project is about to begin. This phase includes data on water quality, microbiology, sediment chemistry and toxicity, benthos and fish. A number of publicly-owned treatment plant (POTW) agencies in the San Diego Region have requested to exchange a portion of their NPDES permit compliance monitoring of ocean receiving waters for participation in Bight '03. The Regional Board concurs with this approach and has sent a letter dated June 18, 2003 (see Attachment B-6) to all of the participating agencies detailing the conditions under which the exchange may take place. Regional Board staff have been working with POTW agency personnel and SCCWRP staff to ensure that all the permit conditions are met by each participating agency that is required to submit monitoring data to the Regional Board and US EPA.

Additional information regarding SCCWRP, data from the 1994 and 1998 Bight monitoring programs, and information regarding the Bight '03 effort can be found on SCCWRP's website <http://www.sccwrp.org/>

#### 7. San Diego Municipal Storm Water Permit Update *(Phil Hammer)*

The Building Industry Association of San Diego County, Building Industry Legal Defense Foundation, California Business Properties Association, Construction Industry Coalition for Water Quality, San Diego County Fire Districts Association, and City of San Marcos have appealed the Superior Court of California's judgement on the San Diego Municipal Storm Water Permit. The Superior Court's judgement previously upheld all requirements of the Permit. The Building Industry Association of San Diego County, et al., filed a Notice of Appeal on June 11, 2003 appealing the Superior Court's judgement to the Court of Appeal of the State of California. Updates will be provided as this issue progresses.

The reviews of many of the Copermittees' Annual Compliance Reports have been completed. The Annual Compliance Reports describe each Copermittee's urban runoff management activities conducted during the previous year. For those reviews which have been completed, each Copermittee has received a comment letter from the Regional Board discussing the findings of the review. The comment letters identify areas where more information needs to currently be submitted, in addition to areas where more information should be submitted in the future. The review of the City of National City's Annual Compliance Report resulted in the issuance of a Notice of Violation to the City. The Notice of Violation was issued due to the lack of adequate information provided in the Annual Compliance Report.

At the April 9, 2003 Regional Board Meeting, the Regional Board requested the County of San Diego to provide the Regional Board with documentation supporting the County's contention in Assembly Bill 1517 that the water quality objectives utilized by the Regional Board are inadequately supported by science. To date, the County of San Diego

has not provided this documentation, though they have offered to resubmit comments previously made during consideration of the San Diego Municipal Storm Water Permit, the 2002 revision of the Clean Water Act section 303(d) list, and the 2003 Basin Plan Triennial Review. Subsequently, the County of San Diego has written a letter to the Executive Officer, seeking a general discussion of various issues regarding the storm water program. The first of such discussions occurred on July 7 and was very productive. Two main topics were covered – inspections of industrial storm water facilities and the concept of watershed-based municipal storm water permits.

8. ACL Complaint Issued to Ryland Homes of California, Inc. *(Frank Melbourn)*

On June 5, 2003, the Regional Board issued Administrative Civil Liability Complaint No. R9-2003-0162 to Ryland Homes of California, Inc. for violations of the State Board's General Construction Storm Water Permit at its Serenada site in Murrieta, California. The Complaint recommended a liability of \$158,350 for the alleged violations: (1) four days of sediment discharge, (2) failure to implement a Storm Water Pollution Prevention Plan (SWPPP) for 68 days, (3) failure to file a Notice of Intent (NOI) for 191 days, and (4) failure to submit a technical report for 68 days and counting. On July 7, 2003, the Regional Board received Ryland Homes' response to the Complaint. In the letter Ryland Homes requested an informal meeting with the Regional Board to resolve the matter. If needed, a public hearing regarding this matter will be scheduled for the August 13 Regional Board meeting.

9. MMP Complaint Issued to the City of San Diego, San Diego Convention Center *(Rebecca Stewart)*

On June 26, 2003, the Regional Board issued Administrative Civil Liability Complaint No. R9-2003-279 against the City of San Diego for \$63,000 for the San Diego Convention Center's dewatering discharge to San Diego Bay. The Complaint alleges twenty-two effluent limitation violations for total suspended solids and copper from January 2000 through March 2003. The violations identified in the Complaint are for violations of the two general NPDES Permits (Order Nos. 95-25 and 2000-90) that regulated the discharge prior to the issuance of an individual NPDES Permit in March 2003.

A public hearing regarding this matter is scheduled for the August Regional Board meeting. If the City waives its right to a hearing the matter will be postponed to allow for a 30-day comment period and then will be brought before the Regional Board for consideration at the September 10, 2003 Board meeting.

10. ACL Complaint Issued to Pioneer Builders, Inc *(Rebecca Stewart)*

On June 12, 2003, the Regional Board issued Administrative Civil Liability Complaint No. R9-2003-270 to Pioneer Builders, Inc. for violations of the Basin Plan, the State Board's General Construction Storm Water Permit, and Cleanup and Abatement Order No. R9-2003-158 at its Castillo del Mar subdivision in Dana Point, California. These violations were the subject of a public hearing on May 14, 2003 regarding the issuance of a Cleanup and Abatement Order. The Complaint recommended a liability of \$139,800 for

the following alleged violations: (1) causing or threatened to cause a condition of pollution, contamination, or nuisance for 46 days, (2) failure to develop and implement adequate sediment and erosion control best management practices for 36 days, (3) failure to submit a complete section 401 Water Quality Certification application for 33 days, and (4) failure to file a Notice of Intent for coverage under the General Permit for 32 days. On July 10, 2003 staff met with Pioneer Builders representatives to discuss the Complaint. At that time Pioneer Builders, Inc. indicated they would not be waiving their right to a public hearing. A hearing is currently scheduled for the August 13 Board meeting.

11. Beach Valuation Project Supplemental Environmental Project Status Report (*Rebecca Stewart*)

In May 2003, it was reported that the Beach Valuation Project Supplemental Environmental Project (SEP) approved by the Regional Board in October 2000, was not going to be completed as required by Administrative Civil Liability Order No. 2000-103. In light of the fact that this SEP was not moving ahead, on May 1, 2003 a letter was sent to the contractor, Santa Monica Bay Restoration Project, requesting that the funds allocated for the project be returned to the State Water Resources Control Board's Cleanup and Abatement Account. We have been notified by Marianne Yamaguchi, Director of the Santa Monica Bay Restoration Project, that the \$262,500 plus interest, should be returned to the State by the end of July 2003 when the certificates of deposit for these funds mature.

12. ACL Complaint Issued to Ashby USA, LLC (*Rebecca Stewart*)

On May 30, 2003, the Regional Board issued Administrative Civil Liability Complaint No. R9-2003-0227 to Ashby USA, LLC for violations of the State Board's General Construction Storm Water Permit, Order No. 99-08-DWQ at its Roripaugh Ranch construction site in Temecula, California. The Complaint recommended a liability of \$84,500 for the following alleged violations: (1) sediment discharges on March 16, 2003 and April 14, 2003, and (2) failure to develop and implement an adequate Storm Water Pollution Prevention Plan for 43 days. On July 11, 2003 Ashby USA, LLC submitted a settlement offer in the amount of \$22,000. The Regional Board has determined that the settlement offer does not adequately address the seriousness of the violations alleged in the Complaint and has rejected the offer. It is anticipated that a public hearing will be held on this matter at the August 13, 2003 Board meeting.

13. Power Washing Discharge by the City of San Diego (*Stacey Baczkowski*)

On May 9, 2003, the Regional Board received a complaint from Mr. Marvin Winters regarding the City of San Diego's (City) power washing policy. The City policy currently allows power washers working within the public right-of-way to discharge wash water to the storm drain if certain Best Management Practices (BMPs) have been implemented. The City's policy is in violation of the Municipal Storm Water Permit (Order No. 2001-01). Pursuant to the Regional Board's request, the City submitted a letter detailing the steps they would take to eliminate the unauthorized discharge. Between now and December 31, 2003, the City will issue warnings and inform power washers and others

hosing down surfaces within the public right-of-way that they will need to purchase capture equipment and train their personnel in its use.

The City will start issuing citations and notice of violations to power washers responsible for discharges into the MS4 system on January 1, 2004.

14. Campbell Shipyard Site (*Brian McDaniel and John Odermatt*)

The San Diego Port District (Port) provided an updated analysis report regarding proposed sediment remedial alternatives for the Campbell Shipyard site. The Port is planning to distribute a draft Environmental Impact Report (EIR) analyzing the alternatives during the week of July 21, 2003. Regional Board staff will meet with Port representatives and other interested parties during the week of August 11, 2003 to discuss additional analyses of a Cap-in-Place remedial alternative. The Cap-in-Place remedial alternative was recently modified by the Port to maintain the maximum amount of navigable water and provide a set aside eelgrass mitigation area. The Port has indicated that the Cap-in-Place alternative would effectively isolate existing sediment contaminants and meet the cleanup goals specified by Cleanup and Abatement Order No. 95-21.

15. Gregory Canyon Landfill (*Carol Tamaki and John Odermatt*)

Pursuant to the California Code of Regulations (CCR), Title 27, Section 21585 and 21710, the information provided to the Regional Board in an application for waste discharge requirements (WDRs) must now be provided in a Joint Technical Document (JTD) format. After June 18, 1997, the JTD is functionally equivalent to a Report of Waste Discharge (ROWD) required for any application for WDRs issued under authority of the Water Code Section 13260.

On June 4, 2003, the Regional Board received a revised JTD. The Regional Board staff has reviewed the revised JTD and found it to be incomplete. The Regional Board staff issued written comments to the discharger on July 6, 2003. The County of San Diego Local Enforcement Agency (LEA) also found the JTD to be incomplete. The LEA issued a letter notifying the discharger of their findings on June 27, 2003.

16. Mission Bay Landfill (*Brian McDaniel and John Odermatt*) (*Attachment B-16*)

On June 20, 2003, Regional Board staff attended a meeting of the technical advisory committee (TAC) convened by City of San Diego Councilmember Donna Frye to discuss the status of the Mission Bay Landfill. Members of the public, City of San Diego environmental staff, and Regional Board staff attended the meeting. Councilmember Frye announced that the City Council unanimously authorized the City Manager to contract with SCS Engineers to perform a site assessment of the closed Mission Bay landfill. The contract is budgeted with \$600,000 to be funded from the Refuse Disposal Enterprise Fund (see Attachment B-16). The study is expected to begin in October with results to be provided beginning in July 2004. The results of the study will be presented to the Natural Resources and Culture Committee. The Mission Bay Landfill Technical Advisory Committee (TAC), co-chaired by City Councilmembers Frye and Zucchet, chose SCS Engineers after a selection sub-committee comprised of City staff and Mission Bay TAC members determined SCS Engineers was the most qualified consultant. The



next meeting of the Mission Bay Technical Advisory Committee (TAC) is scheduled for July 25, 2003.

17. Omar Rendering Facility (*Brian McDaniel and John Odermatt*) (*Attachment B-17*)

The former Omar Rendering facility is located at 4826 Main Street (formerly Otay Valley Road) in the City of Chula Vista. By letter dated June 12, 2003, the property owner (Otay Mesa Ventures II, LLC) notified the Regional Board of a proposed sale of the property, including the Class I hazardous waste landfill regulated under Regional Board Order No. 97-40 (see Attachment B-17). Otay Mesa Ventures II indicates that the property will be sold to Knowlton Realty Advisors, LLC. The prospective buyer has previously presented preliminary plans to the Regional Board proposing to develop the property into an auto dealership and repair facility. In March 2003, the Regional Board issued Cleanup and Abatement Order No. R9-2003-0080 to Otay Mesa Ventures II, LLC for remediation of groundwater pollution from the Omar site. A Site Remediation agreement (*e.g.*, to limit liability of the prospective purchaser under the provisions of the Polanco Act) with the City of Chula Vista Redevelopment Agency is currently being developed jointly by representatives from Landbank, the prospective buyer, the Redevelopment Agency of the City of Chula Vista, Regional Board staff, and SWRCB OCC staff.

### **PART C**

#### **STATEWIDE ISSUES OF IMPORTANCE TO THE SAN DIEGO REGION**

1. Caulerpa taxifolia Eradication and Prevention Activities (*Chiara Clemente, Lesley Dobalian & Bruce Posthumus*) (*Attachment C-1*)

Pursuant to SWRCB Resolution No. 2001-309, SDRWQCB staff completed the quarterly progress report to the SWRCB on *Caulerpa taxifolia* eradication and prevention activities for the period April through June, 2003. A copy of the report is attached. Although the results of eradication efforts remain encouraging, unless all *C. taxifolia* is found and successfully treated, the threat of re-growth and spread remains.

2. Clean Water Act Section 303(d) List of Impaired Waters – 2002 Update (*James Smith*)

On June 6, 2003 the United States Environmental Protection Agency (USEPA) partially approved the statewide version of the 2002 update to the Clean Water Act Section 303(d) list. The USEPA accepted all proposed listings and moved to add 5 additional water bodies. None of these additional water bodies are located within the San Diego Region. Therefore, the 2002 update to the section 303(d) list for the San Diego Region is considered final.

In related developments, the State Water Resources Control Board (SWRCB) released its draft Section 303(d) Listing Policy on 1 July 2003. Pursuant to SB 469, SWRCB staff prepared a draft policy on assessing California surface waters. The draft policy is posted at: [http://www.swrcb.ca.gov/tmdl/docs/listing\\_policy\\_draft\\_070103.pdf](http://www.swrcb.ca.gov/tmdl/docs/listing_policy_draft_070103.pdf)

The draft policy describes the process by which the SWRCB and Regional Water Quality Control Boards (RWQCB) shall comply with the listing and reporting requirements of Clean Water Act Sections 303(d) and 305(b). The draft policy will be discussed at the AB 982 Public Advisory Group meeting scheduled for July 23-24, 2003. The agenda for the meeting was available on July 11, 2003.

It should be noted that the Total Maximum Daily Load (TMDL) Roundtable Committee, which is comprised of staff from all 9 regions and the Office of Chief Council attorney specializing in Section 303(d)/TMDL issues, created its own draft listing policy and submitted it to SWRCB staff in December 02. That document had general support of staff from all 9 RWQCBs.

In addition, the SWRCB will require the RWQCBs to begin the 2004 update to the section 303(d) list in November of this year. It is anticipated that the Listing Policy will be completed in time for implementation. The policy will require the biannual update to the section 303(d) list, confirmation of existing listings, and the full section 305(b) assessment of all surface waters in the region. The 2002 biannual update took over 2 years to complete and primarily only dealt with the biannual section 303(d) update. Implementation of the SWRCB draft policy is expected to double or triple the amount of RWQCB resources needed. Since there is no dedicated funding for these efforts, the resources will have to be redirected away from TMDL development.

### 3. "Our Synthetic Sea" Video (*Pete Michael*)

The State Water Resources Control Board has forwarded to the Regional Board a copy of the 30-minute videotape *Our Synthetic Sea* distributed by the Algalita Marine Research Foundation. The video demonstrates how plastic trash discharged to the ocean during storms in southern California is dispersed into eddies of the Pacific Ocean gyre, areas in the middle of circulating currents, where it is consumed by sea life. The video observes that because plastics are high molecular weight polymerized derivatives of petroleum, and thus not subject to microbial degradation, nearly all the plastic ever produced still exists. Water samples taken at Midway Island, the Hawaiian Islands, far out to sea in the Pacific Ocean eddies, and coastal California indicate that plastics continue to build up in ocean waters. The buildup is so large that the weight of plastic was measured at twice that of zooplankton in seawater along the southern California coast and at six times the weight of zooplankton in a mid-ocean eddy.

The video proposes that jellyfish, fish, turtles, and birds may either passively ingest plastic with their food or selectively consume specific colors and sizes of plastic. This could explain why the predominant color of plastic discharged to coastal California coastal waters changes from brightly-colored reds to subdued blues by the time it washes onto Oahu beaches. The video ends with a discussion of how small pellets or "dust" of degraded plastic adsorb synthetic organic chemicals, including DDT and PCBs, thus concentrating these persistent chemicals in the food chain. The video discusses the implications of long-term loss of reproductive ability in animals and humans due to endocrine disruption caused by plastic buildup in the ocean. It proposes that human

reproduction may be affected within a few generations because levels of chemical disrupters are increasing in the food chain.

Cal/EPA endorses this video and forwarded a copy that will be presented at the Regional Board office on the afternoon of July 21. The Internet address of the Algalita Marine Research Foundation is [www.algalita.org](http://www.algalita.org).